

The Canadian Well Identifier, not your Daddy's UWI

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Summary

It's 1965, and a new standard is being rolled out in the Canadian Petroleum industry. Designed by industry, for industry and adopted as a standard by the Canadian Petroleum Association (CPA), it became known as the CPA UWI (unique well identifier). In 1965, Lester B. Pearson is the Prime Minister of Canada and the most popular vehicle is the Ford Mustang GT 350, which could be purchased for around \$2500.00 and power steering was becoming a standard on all vehicles. The big names in the energy section include Amoco, Gulf Canada, Dome Petroleum, HBOG, Canadian Pacific Oil and Gas. Artifacts of those great companies still exist in our vast data stores. Look how far the industry and technology has come, hand in hand together. In 1965 we worked primarily on paper, with well files and paper maps. About this time, we are testing cyclic steam in the "Tar" sands. The predominate well profile was a single vertical borehole, and the CPA UWI was the standard identifier, used by all disciplines, across the well's life, from licensing to the end of life. The CPA UWI is a descriptor by nature tied to the bottom hole of the borehole and because of its descriptive nature gives us immediate valuable information. This won't change.

But, let's have the conversation about change, how many of us are still driving that Ford GT 350, using the same fridge from 1965, sporting the same haircut?

Wells are critical assets for energy companies, and well data represents our understanding of the subsurface, the rocks, the steel and equipment buried deep underground. Since 1965, our technology has changed, how we drill wells has changed and yet the unique well identifier (UWI), designed and implemented 55 years ago, has not changed. In 2020, the industry requires an identifier that will address the way we do business today, the way we drill wells today. This discussion will explore those business requirements driving the necessity of this change, focusing on answering why we might want to add a new well identifier to our tool belt.

Theory / Method / Workflow

The Canadian Well Identification System (CWIS) is an identifier whose time has come. CWIS is planned to be implemented by the Alberta Energy Regulator (AER) in the near future. This talk breaks down the concepts behind it and explains how it can be a valuable tool for you. CWIS addresses the limitations of the UWI, while not replacing it. Yes, your UWI is safe!

Our industry is one of constant change, driven by the need to address our environmental footprint, reduce our cost, and embrace new technologies. We no longer predominately drill just single vertical boreholes, and the management of the data of wells needs new tools like CWIS to address these changes. De-mystifying the CWIS, walking through examples of CWIS, and talking in practical terms about the benefits will all be discussed in this talk.

Results, Observations, Conclusions

The CWIS gives the industry a permanent identifier, allowing for changes (amendments) that occur with the CPA UWI, to be handled the same way as any other descriptor. The CWIS also is not limited to 9 event sequences, breaking a historical barrier which has been extremely challenging for operators, regulators and data vendors in managing the information around wellbores/completions. The CWIS will not change over time. The only information within the CWIS is the province and the component type and therefore will remain permanently assigned to that well component. Each well component in a drilling configuration of a well family will share the 1-9 position, the 10th indicates the component type (borehole or reporting) and the 11-13 position is the permanent identifier value. For those who work in the beginnings of a well lifecycle, you may be questioning the need for the CWIS, and that is understandable as those functions are only involved for a short time and then move on to other wells. For geoscientists and those in well data management or those who rely on the historical data, the CWIS gives the industry the opportunity to vastly improve processes and management. That improvement provides the framework for lookbacks, and other analytics which will add great value to the industry.

Novel/Additive Information

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References

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